Patent Claims:

1 – 19 (canceled)

20. (new) A burner, comprising:

a fuel that is supplied to the burner and flows in a flow direction; and

a concentration distribution of the fuel in a plane perpendicular to the flow direction,

wherein the concentration distribution is not constant in order to avoid combustion instabilities during operation of the burner.

21. (new) The burner according to claim 20, wherein the burner has a burner longitudinal axis, a radial direction disposed perpendicularly to the burner longitudinal axis and the concentration distribution of the fuel varies in the radial direction.

22. (new) The burner according to claim 21, wherein the burner has a burner longitudinal axis that represents the interior area of the burner, and the concentration distribution of the fuel decreases from an interior to an exterior.

23. (new) The burner according to claim 20, wherein the fuel can be supplied in a channel and air and/or oxygen can be supplied into the channel.

24. (new) The burner according to claim 20, wherein the fuel, air, or oxygen is supplied to a channel, and the channel is embodied annularly around the burner longitudinal axis.

25. (new) The burner according to claim 24, wherein a fuel-gas mixture flows in the channel.

26. (new) The burner according to claim 20, wherein the burner is a gas turbine burner.

27. (new) The burner according to claim 20, wherein the burner has a diffusion or pilot burner.

28. (new) The burner according to claim 20, wherein the burner is a premix burner.

29. (new) The burner according to claim 20, wherein the burner has a channel and a swirl blade disposed in the channel.

30. (new) The burner according to claim 29,wherein the fuel is supplied to the channel via a fuel nozzle in the swirl blade.

31. (new) The burner according to claim 30, wherein the swirl blade has fuel nozzles with diameters that vary and produce the non-constant concentration distribution of the fuel.

32. (new) The burner according to claim 31, wherein the burner has a burner longitudinal axis that represents the interior area of the burner and the burner has a radial direction disposed perpendicularly to the burner longitudinal axis, and the diameter of the fuel nozzles of an installed swirl blade decreases in the radial direction from the interior to the exterior.

33. (new) A burner, comprising:

air and/or oxygen supplied to the burner and flows in a flow direction; and

a distribution of the air and/or oxygen of an outflow angle in a plane perpendicular to the flow direction,

wherein the distribution of the outflow angle is not constant in order to avoid combustion instabilities during operation of the burner.

34. (new) The burner according to claim 33, wherein the air and/or oxygen is supplied in a channel, and a fuel is supplied to the channel.

35. (new) The burner according to claim 33, wherein the burner has a burner longitudinal axis and the fuel, air, or oxygen can be supplied to a channel and the channel is embodied annularly around the burner longitudinal axis.

36. (new) The burner according to claim 33, wherein the burner has a burner longitudinal axis, the burner has a radial direction disposed perpendicularly to the burner longitudinal axis, the burner has a channel in which a medium flows, and the flowing medium has an outflow angle between its flow direction and a plane perpendicular to the burner longitudinal axis and the angle varies in the radial direction.

37. (new) The burner according to claim 36, wherein the burner has an interior area and the outflow angle decreases in the radial direction from an interior to an exterior.

38. (new) The burner according to claim 33, wherein the burner has a swirl blade, the swirl blade having a bladed disk which is wound around a winding axis such that the gas flowing past the swirl blade in the flow direction along an edge of the bladed disk forms an intersecting angle not equal to zero with the flow direction and has different outflow angles.

39. (new) The burner according to claim 38, wherein the burner has a radial direction disposed perpendicularly to the burner longitudinal axis and the outflow angle of a gas flowing past a swirl blade in the radial direction has different outflow angles at the swirl blade with the outflow angle decreasing in the radial direction from the interior to the exterior.